

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Parts 73 and 74 of the)	MB Docket No. 03-185
Commission's Rules to Establish Rules for Digital)	
Low Power Television, Television Translator, and)	
Television Booster Stations and to Amend Rules)	
for Digital Class A Television Stations)	

**COMMENTS OF
THE PUBLIC BROADCASTING SERVICE,
THE ASSOCIATION OF PUBLIC TELEVISION STATIONS, AND
THE CORPORATION FOR PUBLIC BROADCASTING**

The Public Broadcasting Service ("PBS")¹, the Association of Public Television Stations ("APTS")², and the Corporation for Public Broadcasting ("CPB")³ (collectively, the "National PTV Organizations") welcome this opportunity to comment on the Federal Communication Commission's ("Commission") *Notice of Proposed Rulemaking* regarding the digital translation of low power television stations and television translators (the "NPRM").⁴

¹ PBS is a membership organization that in partnership with its 358 member stations serves the American public with programming and services of the highest quality, using media to educate, inspire, entertain, and express the diversity of perspectives. Each month, PBS reaches more than 118 million people through television and nearly 21 million people online, inviting them to experience the worlds of science, history, nature, the arts, and public affairs.

² APTS is a non-profit organization whose membership comprises the licensees of nearly all the nation's CPB-qualified noncommercial educational television stations. The APTS mission is to support the continued growth and development of a strong and financially sound noncommercial television service for the American public.

³ CPB is a private, non-profit corporation created and authorized by the Public Broadcasting Act of 1967 to facilitate and promote a national system of public telecommunications. Pursuant to its authority, CPB has provided millions of dollars in grant monies for support and development of public broadcasting stations and programming.

⁴ Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations and to Amend Rules for Digital Class A Television Stations, *Further Notice of Proposed Rulemaking and Memorandum Opinion and Order*, MB Docket No. 03-185 (Sept. 17, 2010).

INTRODUCTION

The National PTV Organizations support the Commission's goal expressed in the NPRM of "hastening the transition of low power television stations [and television translators] to digital operations, while minimizing disruption of existing service."⁵ The NPRM represents a significant step toward providing the benefits of the digital transition to all Americans, including those in rural and other areas served by television translators.

As the Commission has recognized, "[t]elevision translators have provided a valuable service in delivering television programming to locations where the signals of TV broadcast stations cannot be directly received due to distance or terrain obstructions."⁶ In particular, digital translator stations are critical to fulfilling the universal service principle at the foundation of public television — that is, they help to ensure that regardless of a household's financial resources or geographic location, it can receive a unique and robust noncommercial service, including children's educational programming. As the National PTV Organizations explained in their 2002 Petition for Rulemaking asking the Commission to authorize digital translators, these stations are an "efficient means of delivering educational and public safety services to populations that live in either rural areas or areas that experience reception problems because of terrain or other factors."⁷

Since the Commission adopted rules authorizing the operation of digital translators, on-channel repeaters, and other low power television services, public television stations around the country have seized upon the opportunity to bring new digital services to rural communities.

⁵ *Id.* at ¶ 4.

⁶ *Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations*, 18 FCC Rcd 18365, 18369 ¶ 9 (2003).

⁷ APTS, PBS, and CPB Petition for Rulemaking, *Enhancement of Broadband Access Through the Preservation of Public Television Translator Service and the Development of Digital Translators and Digital On-Channel Repeaters*, at 3 (filed May 29, 2002).

Today, approximately two-thirds of the over 600 translator stations nationwide that re-broadcast public television signals are operating in digital format. These digital translators enable many rural viewers to benefit from the public television community's multi-billion dollar investment in the transition to all-digital broadcasting — wirelessly delivering HD programming and multiple SD multicast streams, while also enhancing traditional educational offerings through datacasting and the support of public emergency alert systems. Just as public television stations have led the broadcast industry in exploring and realizing the potential of digital broadcasting to serve the educational, cultural, and informational needs of local communities, they are leading the industry in bringing those benefits to rural viewers who are not served by full-power stations.

In short, we support the Commission as it works to successfully conclude this final phase of the digital transition, and we believe that many of the specific proposals in the NPRM make for sensible policy. Yet just as with the full-power transition, great care should be taken to ensure that viewers do not have analog service taken away before digital service is prepared to replace it. While much progress has been made in the transition to all-digital translator operation, work remains to be done. Public television stations operate some 200 translators yet to be converted to digital and face a combination of economic strain and operational concerns in making the transition. Because of these challenges, a rushed cessation of analog translator broadcasts could jeopardize the provision of television service to rural communities across the country. By adopting ambitious yet realistic deadlines along the lines proposed herein, the Commission can foster a successful and consumer-focused transition of translators and other low power television services.

I. TRANSLATORS AND OTHER LPTV STATIONS SHOULD BE REQUIRED TO CEASE ANALOG BROADCASTS BY DECEMBER 31, 2013.

The National PTV Organizations support the Commission's intention to adopt a hard deadline for licensees to cease operating their analog low power television facilities. Completing the transition will bring the benefits of digital television to all Americans, and setting a specific deadline will bring clarity and certainty to the license-holders.

In choosing a date for the transition, we believe the Commission should be ambitious but realistic about the work that needs to be completed and the challenges faced by public television stations in completing that work. Given these factors, we recommend a deadline of December 31, 2013 for the analog shutoff.

PBS research shows that, although stations have been working in earnest since before the primary digital transition to convert translators to digital operations, approximately 200 public television-owned analog translators remain in use across the public television system. For most of these translators, there is no ready digital replacement for the reasons outlined below. The fact that these translators continue to broadcast in analog is not due to a lack of will or lack of a deadline for completion. While the public television system believes that a firm deadline is important for the entire industry, there are three important factors that pose significant hurdles in completing the conversion:

1. Funding. Public television stations have always faced significant funding limitations.

The stations rely on programs such as the Public Telecommunications Facilities Program (PTFP) and the U.S. Department of Agriculture Rural Utilities Service (RUS) to fund facilities upgrades – including those for translators. While some funds have been forthcoming, in most cases they do not support the full cost of digital conversion and they require stations to front the cost before receiving reimbursement.

In times of challenging budgets, obtaining the necessary funds to complete the digital conversion of some 200 translators will take time.

2. Weather. A large proportion of the translator sites — particularly in some of the western states, which have many translators in use — are in mountainous areas that are accessible for only a few months per year. Thus, even once a funding cycle has been completed, work may not commence until weather conditions permit.
3. Staff Time. Engineering staffs at many public television stations have been cut significantly through the recent economic downturn. Thus, simply having staff time available to complete or even manage the work is a challenge at many stations.

These factors lead us to believe that, even with the most expeditious FCC processes in place, it will take multiple funding cycles across multiple construction seasons for many of the translators to be replaced.

The 2012 date for cessation of analog broadcasts that is proposed in the NPRM is premature and would likely force both commercial and non-commercial licensees to abandon service to many Americans — a result not desired by the Commission, any of the licensees, or the viewers. A transition date of December 31, 2013 would still be challenging for many license-holders. However, we believe that a late-2013 date appropriately balances the needs of the broader community to complete the transition with those of the individual license-holder to have appropriate time to complete the necessary work so that they can continue to serve the communities currently reached by analog translators.

The Commission also seeks “comment on whether additional outreach efforts are necessary” and the “types of Commission outreach to implement for this phase of the DTV

transition.”⁸ The National PTV Organizations are confident that the public television community will work diligently to inform local communities of this second digital transition just as we did during the first such transition. Together with the National PTV Organizations, local public television stations provided comprehensive consumer awareness and education to the public. These educational campaigns raised awareness about the DTV transition and its impact among viewers. Such outreach was effective in prompting viewers to take the steps necessary to ensure that they would continue to have access to free, over-the-air television. Support from government programs was critical in this process, and given the difficulty of reaching some of the remote communities currently served by analog translators, we welcome any available funding and the Commission’s suggested plan to “expand and update the FCC’s existing call center in order for consumers to receive assistance over-the-phone” and to “encourage the development of third-party walk-in DTV help centers.”⁹ With the experience gained in the full power transition and the support of the Commission, we believe that analog translator operators will be prepared to educate their communities on this impending digital transition.

II. THE FIRM DEADLINE FOR A TRANSLATOR TO EXIT THE OUT-OF-CORE SPECTRUM SHOULD BE THE LATER OF DECEMBER 31, 2012 OR SIX MONTHS AFTER A DISPLACEMENT APPLICATION IS APPROVED.

The National PTV Organizations support the Commission’s intention to complete the out-of-core transition. Completing this transition will reap benefits for all concerned. However, a realistic approach to scheduling and process is critical to ensure success for licensees and the full benefits of completing the transition for the public.

⁸ NPRM at ¶ 18.

⁹ *Id.* at ¶ 19.

As noted in Section I above, public television stations face construction cycles constrained by funding and budget cycles, seasons of the year, and operational capacity that make it very difficult to meet the ambitious 2011 dates proposed by the NPRM for *all* stations to exit the out-of-core spectrum. Notably, 700 MHz licensees already have the option of displacing an out-of-core, secondary station at any time through procedures established by the Commission. Thus, there would be no harm in providing a slightly longer timetable for the firm deadline to exit the 700 MHz band than that recommended in the NPRM.

Specifically, the NPRM has proposed that displacement applications be due by June 30, 2011 and that stations cease all operations on channels 52-69 by December 31, 2011. Yet even the engineering work necessary to support such applications could not be completed on such an ambitious timetable. Accordingly, we recommend a date of June 30, 2012 for final submission of displacement applications.

Further, the notion of a firm date to exit the out-of-core spectrum without assurance that action will be taken on displacement applications by that date is problematic. This approach would provide no certainty to translator licensees as to the amount of time they will have between approval of their displacement applications and the deadline to cease all operations on channels 52-69. We therefore recommend that the date be set as December 31, 2012 *or* six months after the Commission approves a given licensee's displacement application — *whichever is later*. This approach would provide stations with the certainty that they will have a sufficient window in which to complete work after the Commission has approved the relevant application. Notably, this approach would not in any way preclude a 700 MHz licensee from using existing procedures to cause displacement of a translator before this proposed firm deadline.

We believe that once a date has been set stations will be very aggressive in transitioning to an in-core channel, subject to conditions out of their control. However, we urge the Commission to provide the dates and structure as outlined above in order to improve licensees' chances of a successful transition to the core channels. Moreover, many rural communities receive public television service via translators that are not owned or operated by public television stations, but rather by local government agencies or other private entities. Our survey of PTV stations suggests that many of these non-PTV owned translators are out-of-core and transitioning in-core will be particularly difficult for the non-PTV operators given current economic conditions. In sum, a short timeframe for moving to the core risks eliminating public television coverage in rural communities where entities operating non-owned translators are unable to quickly complete the transition.

III. THE COMMISSION AND MEDIA BUREAU SHOULD FACILITATE THE PROCESS FOR CONVERTING FROM COMPANION CHANNEL TO DIGITAL-ONLY OPERATION.

Many public television stations are providing both analog *and* digital translator service through operation of a digital companion channel. In order to complete its digital transition, a translator station with a companion channel will need to: (i) flash cut to digital on its analog channel, and return its digital companion channel, *or* (ii) surrender its analog channel and thereafter operate only on the digital channel. The National PTV Organizations welcome the Commission's attention to the need for an efficient regulatory process in connection with these steps, and we agree that the Media Bureau should be delegated the authority to establish that process.

Given that stations with companion channels are already providing a digital service, such stations should be allowed to terminate their analog channels and thereafter operate only on the

digital channels so long as they provide advance notice of 30 days to the Bureau. By making the notice process straightforward and flexible, the Bureau can facilitate the conversion to all-digital broadcasts for stations with companion channels. In that regard, the Commission and Bureau should not prescribe rules concerning the nature or amount of viewer notice required prior to surrendering a companion channel; because their own viewers are at stake, licensees have ample incentive to notify viewers in advance of their conversion to all-digital broadcasts.

IV. THE PROPOSED MODIFICATION OF THE MINOR CHANGE DEFINITION IS SENSIBLE IN MOST CASES BUT MAY HAVE UNFORESEEN CONSEQUENCES IN CERTAIN CIRCUMSTANCES.

The Commission's proposal to expand the "30-mile" rule to apply to low power television transmitters makes sense and is a workable adjustment in most situations, but could have unforeseen consequences in certain circumstances. The Commission proposes that "any digital low power television modification that proposes a change in transmitter site of greater than 30 miles (48 kilometers) from the reference coordinates of the existing station's antenna location will be considered a new proposal."¹⁰

The National PTV Organizations support the Commission's intent with the proposed change because we agree that stations should not be "able to frustrate the intent of the minor change rule."¹¹ However, certain member stations (particularly in the western U.S.) need to string numerous translators out along great distances to reach the most remote areas of their state. These stations may end up having to propose a "modified facility that is a substantial distance from the station's existing location while showing only a very slight amount of contour overlap," but this does necessarily mean that they intend to "frustrate the intent of the minor change

¹⁰ *Id.* at ¶ 39.

¹¹ *Id.*

rule.”¹² Rather, such stations may need to make use of the existing minor change rule in order to adjust their disparate translator setup to avoid interference from and with other new electromagnetic spectrum uses. We recognize that such cases are certainly not the norm and that in most situations the proposed change to the minor modification rule makes sense, but if the Commission proceeds with this change, we urge the Commission to give full and expedited consideration to waivers for stations operating extensive translator networks for the purpose of delivering public television to the most remote and isolated communities in their states.

V. THE SERVICE AREAS OF PROPOSED DIGITAL FACILITIES SHOULD BE BASED UPON ACTUAL INSTEAD OF ASSUMED VERTICAL ANTENNA PATTERNS.

The National PTV Organizations support the Commission’s proposal “to revise the vertical antenna patterns used in the prediction methodology for the low power television services.”¹³ As the Commission notes, using actual antenna data will improve the interference predictions and thus provide results closer to actual likely outcomes. While use of actual, instead of assumed, antenna patterns may in some cases limit the allowed coverage of a proposed digital facility, it is in all parties’ interests for potential interference to come to light *before* a facility is built.

We also agree that it would be infeasible to apply this new methodology to all existing digital facilities, as doing so would require thousands of stations to submit new antenna patterns. The downside, of course, is that for the foreseeable future, interference analyses will be based on a mix of actual and assumed antenna patterns. It therefore would be appropriate for the Commission to give special consideration to waiver requests that are premised on the notion that

¹² *Id.*

¹³ *Id.* at ¶ 2.

the mix of actual and assumed patterns creates an overestimation of a proposed facility's interference potential to other stations.

VI. TRANSLATORS AND OTHER LPTV STATIONS SHOULD HAVE THE OPTION OF USING THE FULL-POWER DTV EMISSION MASK.

The National PTV Organizations support the Commission's proposal "to allow low power television stations to use the emission mask used by full power television stations."¹⁴ We agree with the Commission that allowing low power television and television translator operators to have the *option* of substituting the full-power DTV emission mask will enable them to secure a channel where they otherwise may not have been able to do so.

¹⁴ *Id.*

CONCLUSION

The conversion of all public television translator stations to digital operation will allow more communities to benefit from the HD, mobile, multicast, datacast, and public safety services delivered by the nation's public television stations. To ensure that this final phase of the digital transition is a success, however, the Commission should set dates-certain for cessation of analog broadcasts that take account of the financial constraints facing stations and the need for sufficient time to construct digital facilities. The National PTV Organizations therefore respectfully request that the Commission (i) require all translator and other low power stations to terminate analog broadcasts by December 31, 2013, and (ii) require all stations operating in the 700 MHz band to file displacement applications by June 30, 2012 and move to the core by the *later of* December 31, 2012 or six months after the Commission grants the applicable station's displacement application.

Respectfully submitted,

PUBLIC BROADCASTING SERVICE

Katherine Lauderdale
Senior Vice President and General Counsel
John McCoskey
Chief Technology Officer
2100 Crystal Drive
Arlington, VA 22202

ASSOCIATION OF PUBLIC TELEVISION STATIONS

Lonna Thompson
Interim President and CEO, Executive Vice
President and General Counsel
2100 Crystal Drive, Suite 700
Arlington, VA 22202

CORPORATION FOR PUBLIC BROADCASTING

J. Westwood Smithers, Jr.
Senior Vice President and General Counsel
401 Ninth Street, N.W.
Washington, DC 20004

December 17, 2010